Your grade: 100%
Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next item →

1. Which of the following can address overfitting?

1 / 1 point

☑ Apply regularization

✓ **Correct**
Regularization is used to reduce overfitting.

☑ Select a subset of the more relevant features.

✓ **Correct**
If the model trains on the more relevant features, and not on the less useful features, it may generalize better to new examples.
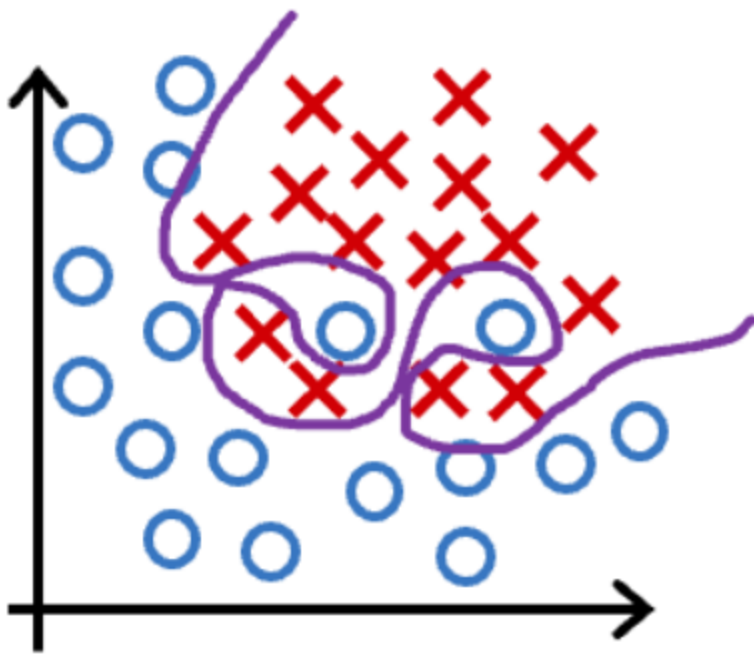
☐ Remove a random set of training examples

☑ Collect more training data

✓ **Correct**
If the model trains on more data, it may generalize better to new examples.

2. You fit logistic regression with polynomial features to a dataset, and your model looks like this.

1 / 1 point

What would you conclude? (Pick one)

○ The model has high variance (overfit). Thus, adding data is, by itself, unlikely to help much.

○ The model has high bias (underfit). Thus, adding data is, by itself, unlikely to help much.

◉ The model has high variance (overfit). Thus, adding data is likely to help

○ The model has high bias (underfit). Thus, adding data is likely to help

✓ **Correct**
The model has high variance (it overfits the training data). Adding data (more training examples) can help.

1 / 1 point

3. Suppose you have a regularized linear regression model. If you increase the regularization parameter λ, what do you expect to happen to the parameters $w_1, w_2, ..., w_n$?

○ This will increase the size of the parameters $w_1, w_2, ..., w_n$

◉ This will reduce the size of the parameters $w_1, w_2, ..., w_n$

✓ **Correct**
Regularization reduces overfitting by reducing the size of the parameters $w_1, w_2, ...w_n$.